

REMARKS

Claims 1, 2, and 4-11 are pending. By this Amendment, claims 1 and 11 are amended and new claims 12 - 14 are added.

The Applicants would like to thank Examiner Easthom for extending the courtesy of the interview on March 7, 2005 to discuss the above identified application and the pending claims. The Applicants acknowledge the content of the interview summaries (Form PTOL-413) prepared by the Examiner, dated March 7, 2005. Furthermore, the following remarks include issues addressed by the Applicants in the interviews and may be considered as a record of the substance of the interviews, supplementing the interview summaries prepared by the Examiner.

In accordance with the tentative agreements reached during the interview with the Examiner, paragraph 42 of the specification has been amended to provide further clarification of the geometrical configuration of Applicant's invention. Support for the amendment is provided by existing paragraph 46, with reference to FIG. 7, in which surfaces that are "faced to each other" (such as the second conductive layer 30 and the first electrode 60 in FIG. 7) are shown substantially overlapping each other. FIG. 4 also illustrates the substantially overlapping structure discussed in paragraph 46. Therefore, no new matter is being added by the amendment to paragraph 42.

Further, in accordance with the tentative agreements reached during the interview, claim 1 has been amended to incorporate the following language to clarify the geometry of the invention:

"a first connector for electrically connecting the first conductive layer located near a first side of the resistance element to the first electrode located near a second side of the resistance element; and

a second connector for electrically connecting the second conductive layer located near a second side of the resistance element to the second electrode located near a first side of the resistance element,

wherein the first and second conductive layers and the first and second electrodes are arranged so that the first conductive layer and the second electrode face each other with interposing and substantially overlap each other with the resistance element interposed therebetween, and the second conductive layer and the first electrode face each other with interposing and substantially overlap each other with the resistance element interposed therebetween.”

As amended, claim 1 overcomes the Examiner’s rejections, since none of the prior art references cited by the Examiner disclose electrodes and conductive layers that are electrically connected in the configuration described in claim 1, since none of the prior art references disclose two pairs of electrodes and conductive layers that “face each other and substantially overlap each other,” as required by amended claim 1. Therefore, claim 1 is believed to be patentable over the prior art for at least the reasons discussed above.

Support for the above amendment to claim 1 is found in paragraphs 45 and 46 of the specification, in conjunction with the accompanying drawings. Paragraph 45 states that “components (a conductive layer and an electrode) positioned on the opposite upper and lower surfaces have opposite polarities[.]” (Emphasis added.) In the drawing figures which disclose this structure (FIGs. 4 and 7, for example), the conductive layer and electrode which are substantially opposite each other have surfaces that face each other and substantially overlap each other. Use of the terms “substantially opposite” and “substantially overlapping” are therefore considered to have the same meaning in this context. Therefore, no new matter is being added by this amendment.

Claims 2 and 4-11 all depend from claim 1, either directly or indirectly and are therefore also believed to be patentable for at least the reasons provided above for claim 1. Please note in this regard that claim 11 has been amended to correct a grammatical error; no new matter has been added by this amendment.

Claim 12 has been added to claim the invention based upon the current flow paths available through the thermistor. Claim 12 recites four paths of current flow through the resistive element using the configuration described by claim 1. Support for claim 12 is found in FIG. 7 and at page 10, lines 8-17 of the original specification. No new matter has been added. None of the prior art references cited by the Examiner disclose all of the current paths made available by Applicant's invention. Claim 12 is believed to be patentable for at least the reasons provided above for claim 1.

Claim 13 adds two additional paths of current flow according to one embodiment of the invention. Claim 13 depends from claim 12 and is therefore believed to be patentable for at least the reasons given for claim 12. Support for claim 13 is also found in FIG. 7 and at page 10, lines 8-17 of the specification. No new matter has been added.

Claim 14 has been added to claim similar structure to that recited in claim 1, but instead requires that the first electrode and second conductive layer be "substantially opposite and facing each other," and that the second electrode and first conductive layer be "substantially opposite and facing each other." Support for this claim is found in paragraphs 45 and 46 of the specification, as well as in amended paragraph 42; no new matter has been added. Claim 14 is therefore believed to be patentable for at least the reasons provided above regarding claim 1.

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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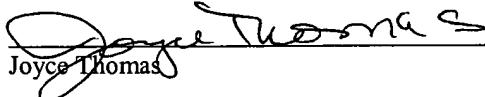
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